



## **INTRODUCTION**

Congratulations on purchasing this Pop Idol Karaoke machine from Acoustic Solutions. It has been developed following an extensive research and development program that has culminated in what we regard as an exceptional home entertainment product.

Our aim when designing this product was to produce a home entertainment machine which could be used for a variety of applications. The robustness and quality of the construction is testament to our research and development program which established that cheaper karaoke machine are not always up to the job.

Because of the features built into this product, the KS-1 is ideal for the following applications:

Karaoke

Disco

Aerobics- varispeed CD & tape cassette allow BPM adjustment

General PA applications

We trust that this product will give you hours of listening pleasure, and provide years of unparalleled performance. As with any new electrical product please be patient and allow at least 36 hours use before all components have acclimatized themselves with your surroundings, and found their optimum working temperature.

<b>CONTENTS</b>	<b>P1</b>	Introduction
	<b>P2</b>	Safety instructions
	<b>P3</b>	Control locations: Front panel
	<b>P4</b>	Connection locations rear panel
	<b>P5</b>	Connections
	<b>P6</b>	Installation and position
		Making the connections
	<b>P7</b>	Using the CD+Graphics player
	<b>P10</b>	Using the audio mixer
	<b>P14</b>	Using the tape player
	<b>P15</b>	Troubleshooting
	<b>P16</b>	Care and maintenance
		Contact details



# SAFETY INSTRUCTIONS

## IMPORTANT SAFETY INSTRUCTIONS

**CAUTION:** To reduce the risk of electric shock, do not remove any cover. **NO USER-SERVICEABLE PARTS INSIDE, REFER ANY SERVICING TO QUALIFIED SERVICE PERSONNEL.**

- Read and keep these instructions available for future reference.
- For indoor use only.
- The unit must only be connected to a suitable mains power supply using the mains power lead provided.
- To reduce the risk of fire or electrical shock, do not expose this unit to rain or moisture.
- Unplug the unit from the wall socket during lightning storms and when it is not going to be used for a long period of time.
- Take care that foreign objects do not enter, or liquids are not spilled, into the enclosure through any openings. If this should happen, refer to qualified service personnel before attempting to use.
- Ensure adequate ventilation - do not cover this unit with curtains, etc.
- Do not install near any heat source, such as radiators, or other equipment that produces heat.
- Protect the mains power cable from being damaged.

**NOTE:** The KS-1 is not completely isolated from the mains power when the mains switch is turned off.



**CAUTION:** TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

## EXPLANATION OF SYMBOLS

The lightning flash symbol with the arrowhead within an equilateral triangle is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be sufficient to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user of important operating and maintenance instructions in the service literature relevant to this appliance.

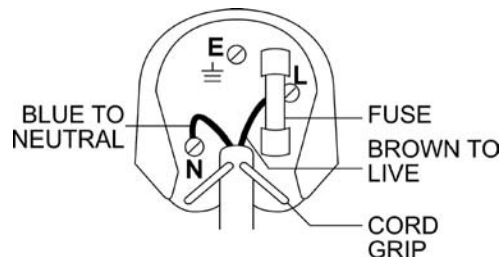
## UK MAINS PLUG DETAILS

For your convenience a mains plug with a fuse (3 Amp) has been fitted to this appliance. For your safety please observe the following information.

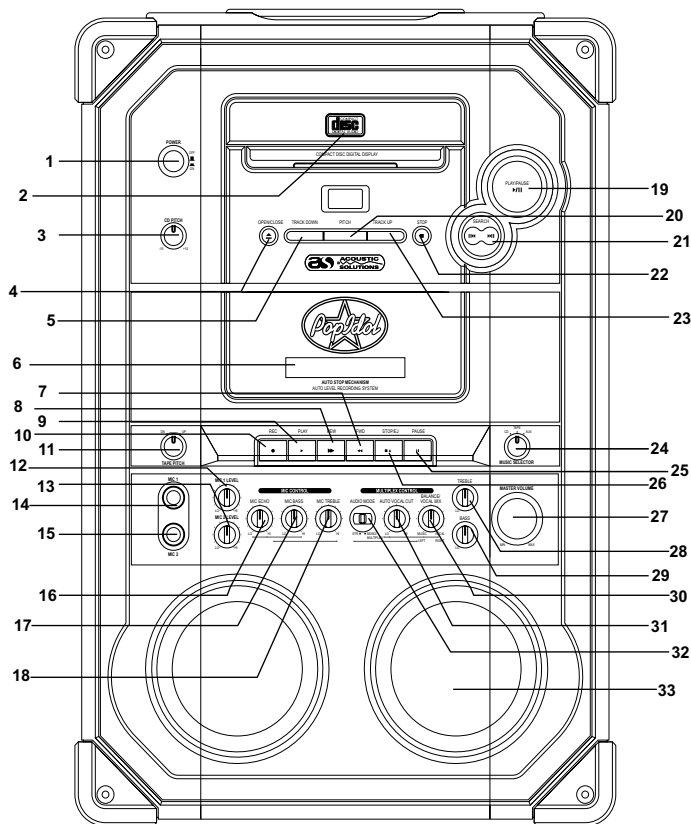
- The KS-1 is designed to operate on AC mains supply between 220 and 240 volts, 50 Hz.
- The wires in the mains lead are coloured in accordance with the following code:

BLUE	- NEUTRAL
BROWN	- LIVE

- Under no circumstances should the Neutral or Live wires be connected to the 'E' (Earth) terminal.



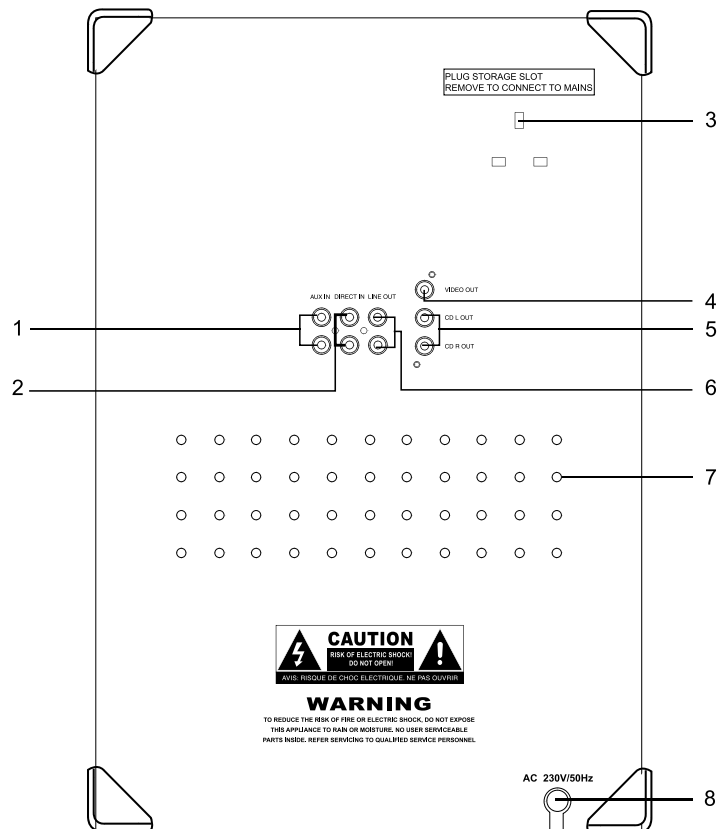
# CONTROL LOCATIONS: FRONT PANEL



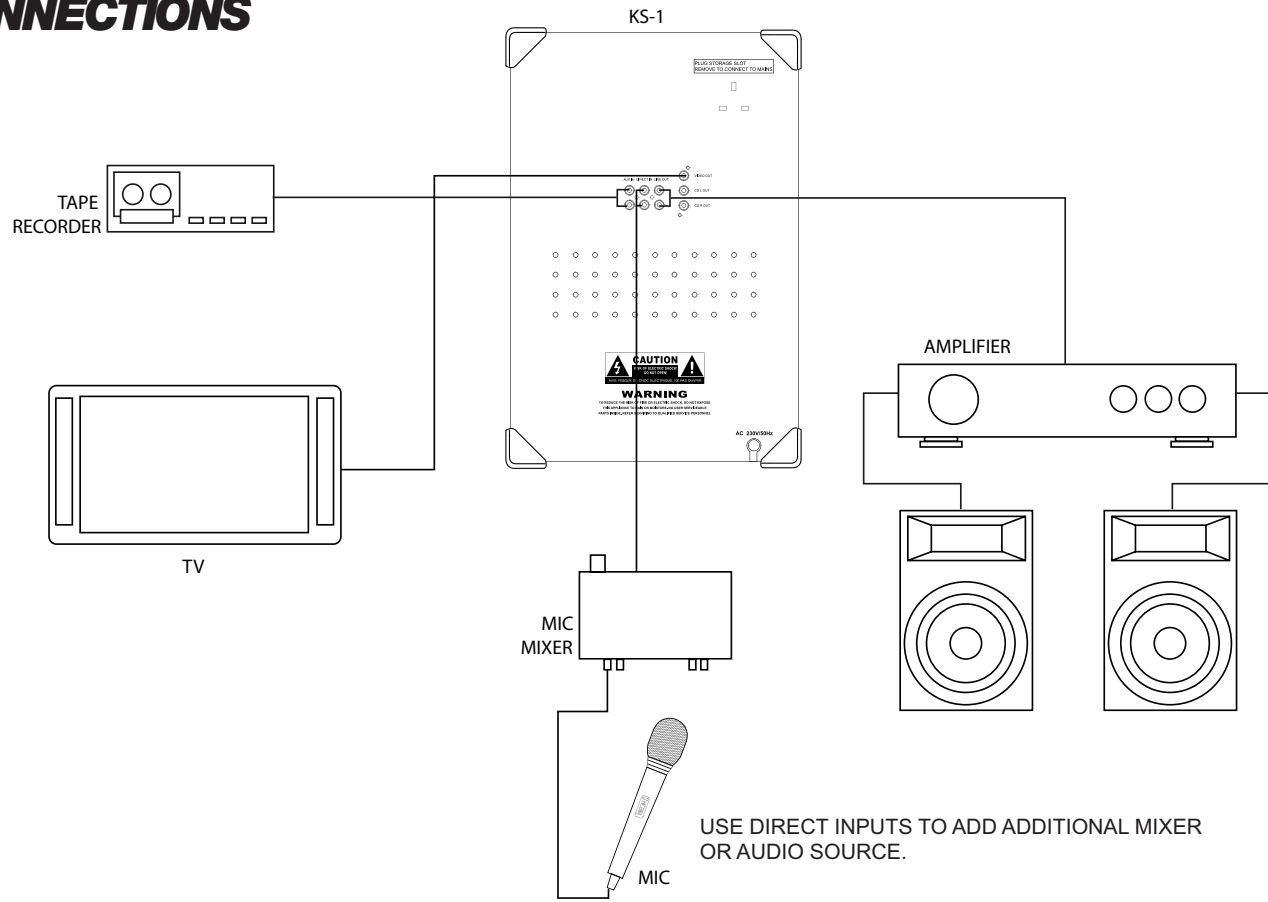
1. Main Power on/off button for audio system
2. CD drawer
3. CD pitch control  $\pm 10\%$  (must have pitch control activation button (7) on)
4. Open/close button for CD drawer
5. Previous track button for CD
6. Tape cassette door
7. Cassette fast forward key
8. Cassette fast rewind key
9. Cassette play key
10. Cassette rec key
11. Cassette pitch control  $\pm 5\%$
12. Mic 1 level control
13. Mic 2 level control
14. Mic 1 input socket
15. Mic 2 input socket
16. Mic echo control
17. Mic bass control
18. Mic treble control
19. Play/ pause button for CD
20. Pitch control activation button for CD
21. Fast search backwards and forwards for CD
22. Stop button for CD
23. Next track button for CD
24. Music selector switch (CD, Tape or AUX input)
25. Cassette pause key
26. Cassette stop/ cassette eject key
27. Master volume control
28. Music treble control
29. Music bass control
30. Balance control when in stereo, or vocal/ music mix control when in multiplex mode
31. Auto vocal cut depth control when in multiplex mode
32. Stereo / mono switch. Use in mono for multiplex mode For further details on multiplex operation please refer to page 14
33. Internal stereo speakers

# CONNECTION LOCATIONS: REAR PANEL

1. Aux line input sockets
2. Direct line input to add additional audio device to mix together with audio output from main mixer controls. This feature allows an additional mic mixer to add more mics if required, or any other audio source.
3. Plug storage slot
4. Video output to TV
5. CD direct outputs to bypass internal mixer controls
6. Line output RCA sockets to connect into higher powered amplification
7. Ventillation holes (do not cover)
8. AC mains cable inlet.



# CONNECTIONS



# **INSTALLATION AND POSITION**

The KS-1 should be positioned on a flat stable surface.

This product contains sensitive electronic circuitry, it is not recommended that excessive force or heavy handling be applied to this product as internal damage may occur. Do not place this product in areas where direct sunlight is present, nor place it adjacent to a radiator or other heating appliances.

Like all electrical devices this unit will generate a modest amount of heat. The cooling of this device is reliant upon the flow of air within the cabinet. Care should be taken not to cover this unit with such items as rugs, covers or curtains which will restrict this air flow and may cause over heating.

Never allow the KS-1 to come into contact with water or liquids, and ensure that small objects do not fall through the ventilation grills. In the event of this happening, disconnect the wall plug from the mains supply immediately, and contact your local dealer for service advice.

Do not position the power cable such that it can be walked upon, or damaged by regular traffic. Ensure that all other interconnect cables are stowed safely behind the unit, and cannot be easily snagged or kicked thus causing possible damage to the unit.

Ensure that all interconnection cables have been made correctly, and that polarity has been maintained.

# **MAKING THE CONNECTIONS**

The following equipment should be included with your KS-1:

1. Main KS-1 mixer unit including CD, Tape, mixer.
2. 2x Microphones.
3. 1 x AV connection lead to link KS-1 to TV with AV input.
4. 1 x CDG sampler disc.
5. 1 x instruction manual.
6. 1x warranty card.

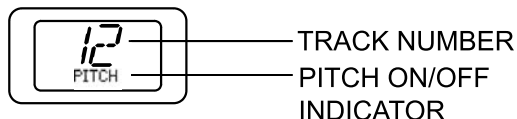
To make the connections to and from the KS-1, please observe the following sequence:

1. Remove all packaging from around the main KS-1 unit, conserve this packaging for transportation in the future.
2. Check all components and ensure you have all parts as listed above.
3. Connect the microphones. Taking each microphone, push the 6.35mm jack plug into the corresponding mic input sockets on the front panel of the KS-1 (14,15, page 3)
4. Then connect the AV cable between the KS-1 and a suitable television, using the 75ohm lead supplied. Connect one end of this lead to the rear of the KS-1 in the yellow AV socket ( 4, page 4), take the other end and insert into a corresponding video input socket on your television. If your television is only fitted with a scart connector it will be necessary to obtain a scart adaptor to allow the AV signal input. These are available from most high street electrical retailers. You will need to select AV channel on your television to obtain karaoke graphics.

# USING THE CD+GRAPHICS PLAYER

The KS-1 is fitted with a conventional CD player, but has been enhanced with graphics output ability for playing karaoke discs, and a speed adjustment of +/-10% for karaoke and aerobics applications.

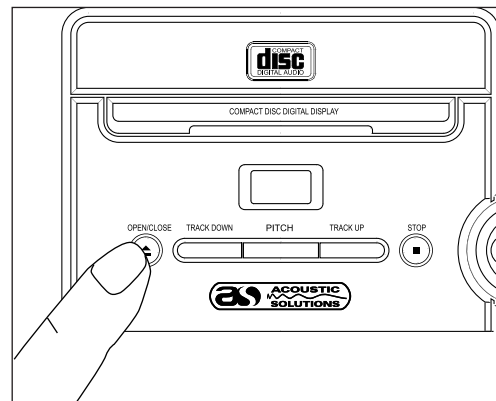
## Understanding the LCD display



The KS-1 is fitted with an LCD display which will show track number, and will indicate if CD pitch control has been activated by displaying the word 'PITCH' below the track number.

## TO LOAD A CD

1. Press open/close (4, page 3), this will open the CD draw. Place CD with label upmost into the carriage. Press open/close again to shut CD loader.
2. The CD will automatically load, you will hear the CD spinning and the LCD screen will flash "--". When loaded the total number of tracks will be displayed on the LCD screen.
3. If there is a problem loading the CD, or no CD is placed in the CD loader, the following display will occur - 'no'. Please check the integrity of the CD, or if the problem persists, please contact your local dealer.



Press OPEN/CLOSE to open the CD loader.

### TO PLAY A CD

To commence playing the CD press play/pause button (19, page 3) once. This will start playing the CD at the first available track. The LCD screen will show the track number playing.

If you are using a CD+Graphics disc, you will be able to hear both audio and view graphics on your television screen. Ensure your audio settings on the mixer controls are correct (see pg 11), and ensure your TV is tuned to the AV channel.

### TO PAUSE A CD

To pause the CD press the play/pause button (19, page 3) once whilst the CD is playing. This will temporarily stop the CD at this point. To recommence play, press the play/pause button again.

### TO STOP A CD

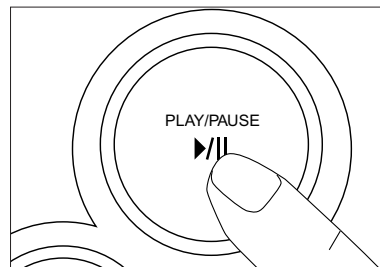
To stop the CD playing, press the stop button (22, pg 3) once. The LCD display will show the total number of tracks on the CD. All functions will be cancelled, to resume play from track one press play/pause (19, page 3) again.

### TO SKIP THROUGH TRACKS ON A CD

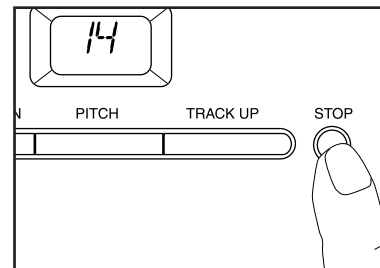
It is possible to change the track number which is being played either forwards or backwards through the CD track listing.

To advance the track, press Track Up button (23, page 3) once, to advance the track number again, repeatedly press this button until the desired track is located.

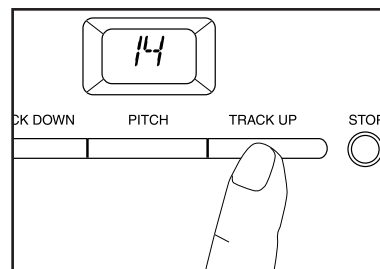
To select a previous track press Track Down button (5, page 3) once, this will return the current track being played to its start, or press this button again to move the CD track back to the previous track. Continue this operation until the desired track is located.



To commence a CD press PLAY/PAUSE.



To stop a CD press the STOP button.





### TO FAST SEARCH THROUGH CD TRACK

It is possible to search through the current track being played in order to find a desired position.

To search forward through the CD track press the right the Search Up button (21, page 3), this will then activate a fast forward search, release this button to stop this search when required. To reactivate this search hold this button down again.

To search backwards through the CD track press the left Search Down button (21, page 3), this will then activate a fast backwards search, release this button to stop this search when required. To reactivate this search hold this button down again.

**Note:** This search feature does not work when playing CD+Graphics discs. This is due to the fact that the video signal becomes illegible during the search operation.

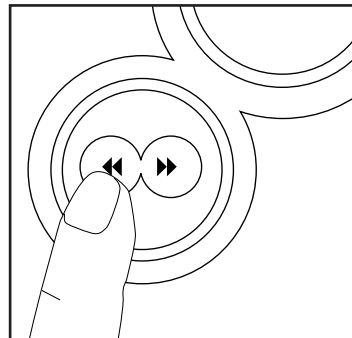
The volume during search will be lower than the normal playing level.

### TO ACTIVATE THE PITCH CONTROL

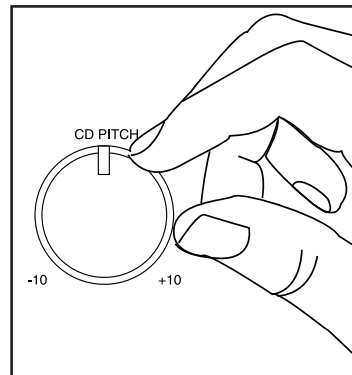
1. It is possible to change the speed of the CD by +/-10% from the normal playing speed. It is necessary to activate the pitch control by pressing the pitch button (3, page 3). The LCD display will show the word pitch below the track number to indicate this function is on.
2. Using the rotary pitch control knob (10, page 3), turn anticlockwise to reduce the speed of the CD, or clockwise to increase it.

**Note:** that this speed setting will remain as set by the pitch control knob (3). The pitch control will be cancelled when the power is removed from the KS-1.

3. To deactivate the pitch control, press pitch button (20, page 3), the word pitch on the LCD screen will be removed and the CD will return to normal playing speed.



To advance a CD track press TRACK UP. To go to the previous track press TRACK DOWN.



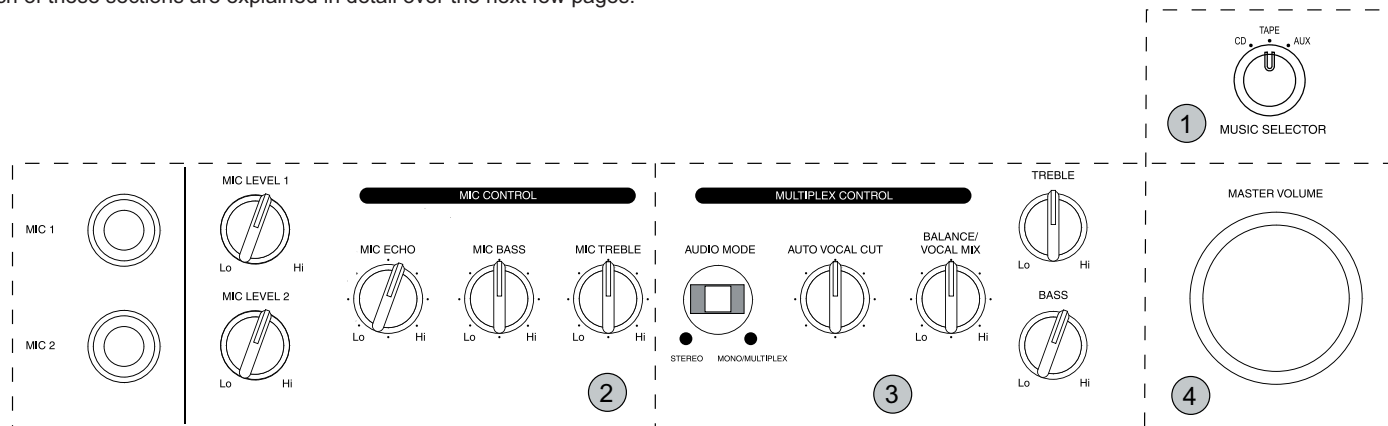
# USING THE AUDIO MIXER

The KS-1 has been designed with a comprehensive audio mixer to allow complete control over your performance.

The mixer has 3 main sections:

1. Music selector switch
2. Microphone section
3. Multiplex control for use with CD+Graphics discs recorded in multiplex format
4. Main audio output controls

Each of these sections are explained in detail over the next few pages.



### USING THE INPUT SELECTOR SWITCH

It is necessary to select which music input source you require. The Music Selector rotary knob (24, page 3) allows the choice between CD, Tape and AUX inputs.

### UNDERSTANDING AND USING THE MIC SECTION

The mic mixer has been designed to allow 2 singers independent control of the levels of their microphones.

Plug the mic to be used into the mic socket 1 or 2, ensure that the switch on the body of the mic is pushed up to switch the mic on.

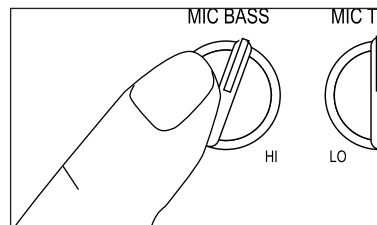
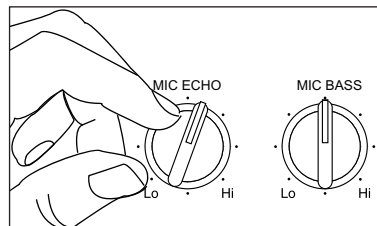
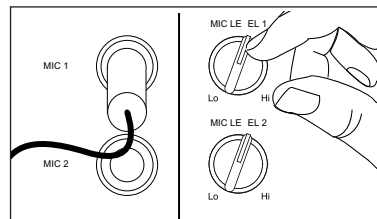
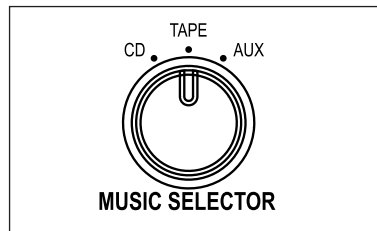
It will be necessary to have the master volume control (27, page 3) set up to a reasonable level.

Mic level 1 can be increased by turning the Mic Level 1 knob (12, page 3) clockwise until the desired mic level is achieved. Similarly the same procedure applies to mic 2.

The depth of echo which is applied to both mics can be adjusted by turning the mic echo control (16, page 3) clockwise to increase the depth of echo, or anti clockwise to reduce down to zero, as required.

The KS-1 is also fitted with bass and treble controls for the microphones which are independent from the main music tone controls. Turn the bass and treble control knobs (17, 18 page 3) clockwise to increase the amount of bass or treble, or anticlockwise to reduce it. The normal listening position for bass and treble is straight up at 12 o'clock, however your desired settings are a matter of personal listening tastes.

Take care not to turn mic levels too high when in close proximity to the loudspeakers as feedback may occur. To reduce feedback, reduce the mic level, or move further away from the loudspeakers.



### UNDERSTANDING MULTIPLEX

The KS-1 has been designed to operate with both normal stereo CD discs, and multiplex karaoke discs.

Multiplex is a term used to describe the separation of the background music from the vocal track. By recording the background music on the left channel of a stereo CD or tape, and the vocal track on the right, it is possible to mix the two to gain a vocal version of a song, or play just the background music as you would normally expect to hear on a karaoke track.

The KS-1 is fitted with comprehensive controls which allow you to make best use of both stereo or multiplex discs or tapes.

For playing normal stereo recordings ensure that the stereo/mono switch (32, page 3) is set to stereo. This will allow you to enjoy the full advantage of the stereo image provided by this format.

When playing multiplex discs or tapes set the stereo/mono switch (32, page 3) to the right into mono.

This will then combine the left and right channels to effectively give you a full vocal version of that track. At this point you have two options:

- 1) Activate auto vocal cut which will reduce the vocal content of the track when you sing into the microphone.
- 2) Use the balance control which will allow a manual mix between the background and vocal content of the multiplex format.

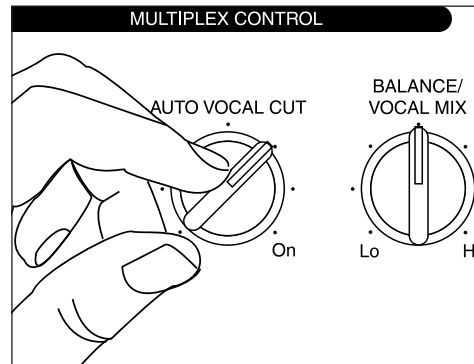
### AUTO VOCAL CUT FUNCTION

Sometimes when singing karaoke it is easy to lose your place or become embarrassed. When using multiplex discs and the auto vocal cut feature, it is possible to replace the singers voice with your own when you start singing into the microphone. If you then subsequently stop singing the singer on the recording will resume to pick up from where you left off.

It is also possible to adjust the amount the singers voice is reduced so that it does not leave all of the singing to you.

To operate this control ensure that the balance/vocal mix control (30, Page 3) is at the 12 o'clock position.

The control Auto Vocal cut (31, page 3), will vary the amount the vocals are reduced, the more that it is turned clockwise. Turning it completely anticlockwise will turn this feature off. The setting of this control is down to preference and can be adjusted until the desired setting is achieved.



### BALANCE / VOCAL MIX FUNCTION

It is possible to mix the amount of vocals in the track manually by using the Balance / vocal mix control (30, page 3).

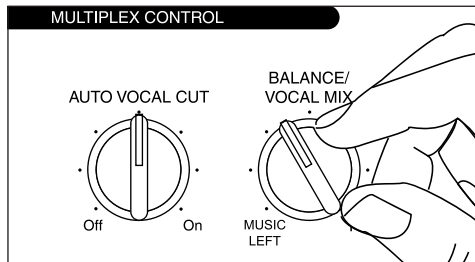
To use this feature ensure that the auto vocal cut function is turned completely anticlockwise and is off.

Ensuring that the Balance/ vocal mix control knob is at 12 o'clock, you will hear a mix of both vocals and background music.

By turning the balance / vocal mix control knob anticlockwise you will reduce the amount of vocals in the song to zero, once the control knob is completely anticlockwise.

By turning the Balance / vocal mix control knob clockwise you will reduce the amount of background music in the song to zero, once the control knob is completely clockwise.

This control can be adjusted until your desired listening setting is achieved.



### UNDERSTANDING THE MAIN AUDIO OUTPUT CONTROLS

The last section of the KS-1 mixer is the main output controls.

These are

1. Bass
2. Treble
3. Master volume.

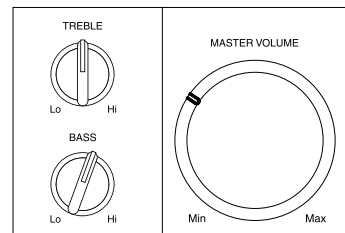
The bass and treble controls (28,29 Page 3) work independently from the microphone bass and treble controls, and apply tone adjustment to the music content only.

Adjust these by turning anticlockwise to cut the amount of bass or treble applied to the music, or conversly clockwise to boost the amount of bass or treble.

**Note:** It is possible to cause longterm damage to the speakers or other equipment connected to the KS-1, if excessive volumes are maintained with both bass and treble controls set to maximum.

The master volume control knob (27, page 3) is effective on both the music content and microphones.

Turning this control clockwise will increase the overall volume of the complete system. This will also effect the signal level which is supplied to the line output sockets, and also the signal which is recorded by the tape player.



The main output controls

# USING THE TAPE PLAYER

The KS-1 is fitted with a tape cassette player which accepts normal magnetic compact cassettes.

We have added a  $\pm 5\%$  pitch control to this standard mechanism to allow it to be used for karaoke or aerobics applications.

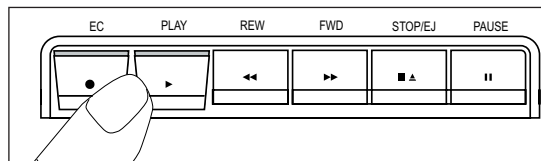
The operations for this cassette are described below.

1. Press Stop/eject button (26, page 3) to open cassette door.
2. Place compact cassette into the cassette door with the magnetic strip facing downwards. Close the door by firmly pushing it back into the cabinet until a firm click is heard.
3. To play a cassette, ensure that music selector switch (24, page 3) is set to tape.
4. Press play button (9, page 3) down to activate play sequence.
5. When the cassette has finished playing this side, it will auto stop. It is necessary to open the tape door (by pressing eject), and remove the compact cassette and turn it through 180 degrees to allow the otherside to be played. Insert the cassette back into the cassette door, close the door again as described above.
6. Repeat the above sequence to commence playing of this side of the tape.
7. To advance the cassette using fast forward, first press stop to stop the tape playing.
8. Press FWD button (7, page 3), this will lock on and commence winding the tape forward. To stop this action press stop button again.
9. To rewind the tape press stop.
10. Press REW button (8, page 3), this will lock on and commence rewinding the tape backwards. To stop this action press stop button again.
11. Both rewinding and fast forwarding will automatically stop when the end of the tape is reached.
12. To pause the tape whilst playing, press pause button until it is locked on. This will temporarily stop the tape in that position. To resume play press the pause button again. Note it is not recommended to pause a tape for a long period of time as tape stretching may occur.

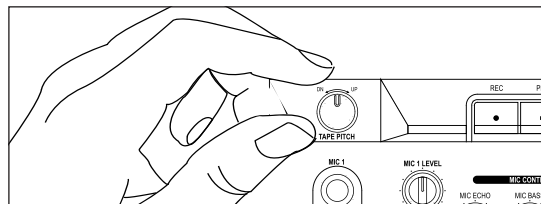
13. To record using the cassette tape, ensure that the music selector switch (24, Page 3) is set to the required audio source. Insert a tape into the cassette door as described. Ensure the tape has not had its security tabs removed which then will not allow recording. Press the Play and Rec buttons (9,10 page 3) down at the same time to activate recording. It is possible to use pause control whilst in Rec mode, this will allow easier stopping and starting at desired recording positions. The level of the recording signal can be altered by the master volume control, a certain amount of trial may be necessary to determine the best master output for your recording purposes.

14. To stop the tape recording press stop button (26, page 3)

15. To adjust the speed of the tape, rotate the Tape pitch knob (11, page 3) anticlockwise to reduce the speed or clockwise to increase it. The pitch adjustment on the tape mechanism is  $\pm 5\%$ . Return the tape pitch knob to the 12 o'clock position to play the tape at normal speed.



To adjust the speed of a tape, rotate the tape pitch knob.



Press the Play and Rec buttons at the same time to activate recording

# TROUBLE SHOOTING

<b>PROBLEM</b>	<b>POSSIBLE SOLUTION</b>
<b>No power when switched on</b>	<ul style="list-style-type: none"> <li>• Mains socket not switched on, or faulty.</li> <li>• Plug not fully inserted into wall socket. Mains fuse has blown inside plug.</li> <li>• Mains fuse has blown inside unit, this will need to be replaced by a qualified service technician.</li> <li>• Power cord has become faulty, this should be replaced immediately by a qualified service technician.</li> </ul>
<b>No Sound</b>	<ul style="list-style-type: none"> <li>• Power not turned on</li> <li>• Music selector switch not set correctly.</li> <li>• Speaker leads not connected.</li> <li>• Volume control set to '0'</li> <li>• Microphones are not connected</li> <li>• Aux line input not connected.</li> <li>• No CD loaded, or no tape in cassette holder.</li> </ul>
<b>The CD will not load</b>	<ul style="list-style-type: none"> <li>• Check disc is not loaded upside down</li> <li>• Check disc is clean and not damaged</li> </ul>
<b>The CD is skipping</b>	<ul style="list-style-type: none"> <li>• Check that the disc is not scratched, dirty, or damaged</li> <li>• Ensure the KS-2 is on a firm level surface</li> </ul>
<b>Microphone does not work</b>	<ul style="list-style-type: none"> <li>• Microphone not switched on, or faulty</li> <li>• Microphone volume set too low</li> <li>• Master Volume set too low</li> </ul>
<b>Loud Buzz or hum</b>	<ul style="list-style-type: none"> <li>• Audio cables have become entangled with mains cables, or faulty</li> </ul>
<b>Multiplex disc vocals and music in separate speakers</b>	<ul style="list-style-type: none"> <li>• Audio mode switch set to stereo.</li> </ul>
<b>Tape/CD running too slow/fast</b>	<ul style="list-style-type: none"> <li>• Pitch controls set incorrectly, reset to zero.</li> </ul>

## ***CARE AND MAINTENANCE***

To clean the KS-1, wipe its case with a slightly moist lint-free cloth. Do not use any cleaning fluids containing alcohol, ammonia or abrasives. Do not spray on aerosol an or near the CD or tape player.

Always use original packaging if it is necessary to transport the unit at any time.

If this unit is used in dusty environments, it may be necessary to have the unit serviced at your local dealer periodically. It is not advisable to allow large deposits of dust to accumulate within this unit as it may prevent correct cooling. Similarly dust deposit which become damp can sometimes lead to electrical problems which may cause severe damage to the delicate electronics within this unit.

## ***CONTACT DETAILS***

We trust you are completely satisfied with this product from Acoustic Solutions Limited, however please feel free to contact us if you experience any difficulties, or if you would like to express your views regarding our products.

Please write to:

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email: [enquiries@acousticsolutions.co.uk](mailto:enquiries@acousticsolutions.co.uk)

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